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## PN 6/125023585 A 19930202

PD - 1993-02-02

PR - JP19900419249 19901212

OPD-1990-12-12

TI - PHOSPHATE ION ADSORBENT

IN - OKUBO AKIRA

PA - TOMITA PHARMA

IC - A61K33/24; B01J20/04; B01J20/06

O WPI / DERWENT

- TI Adsorbent for phosphate ion used e.g. in medicine comprises active component of titanium oxide prepd. by hydrolysis of titanium salt opt. contg. e.g. alkaline earth metal ions
- PR JP19900419249 19901212
- PN JP2981574B2 B2 19991122 DW200001 B01J20/06 004pp
  - JP5023585 A 19930202 DW199310 B01J20/06 005pp
- PA (TOMI-N) TOMITA SEIYAKU KK
- IC A61K33/24; A61K33/42; B01J20/04; B01J20/06; C02F1/28
- AB J05023585 An adsorbent (A) comprises an active component of (T) a titanium oxide prepd. by hydrolysis of (T1) a titanium salt. (T) can be treated with acid and/or with ion of alkaline earth metal. The titanium salt (T1) can contain an ion of an alkaline earth metal or oxo-acid.
  - The titanium salt is pref. titanium-chloride, -bromide, -sulphate, etc.. Hydrolysis of the titanium salt is carried out by heating at 80-100 deg.C during which ammonium hydroxide, sodium hydroxide, etc. can be added. Treating of the titanium oxide with acid is carried out with hydrochloric-, or sulphuric- acid at pref. more than 80 deg.C, and a pH of 0.2-4.0. The alkaline earth metal ions are pref. calcium-chloride, -nitrate, magnesium-chloride, etc. which is pref. used at pH 8-9. The concn. of the ions is pref. 0.2-4.0 mol/l. The oxo-acid is pref. sulphuric-, nitric-acid, etc. and it is pref. used in an amt. of 0.5-3.0 mol per 1 mol of titanium
  - USE/ADVANTAGE The adsorbent is used in medicine or industrial prods.. The cpds. can be used in medicine to treat symptoms caused by a high concn. of phosphorus in the blood. The adsorbent can also be used for removing phosphate from water, e.g., in rivers, ponds, etc. which is the cause of eutrophication of water. (Dwg.0/0)

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AN - 1993-079619 [10]

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- PN JP5023585 A 19930202
- PD 1993-02-02
- AP JP19900419249 19901212
- IN OKUBO AKIRA
- PA TOMITA SEIYAKU KK
- TI PHOSPHATE ION ADSORBENT
- AB PURPOSE:To provide phosphate ion adsorbent with outstanding phosphate ion adsorptive power, which is useful as a medical or an industrial product.
  - CONSTITUTION: The subject phosphate ion adsorbent contains a titanium oxide obtained by hydrolysis of titanate or a titanium oxide obtained by hydrolysis of titanate which contains at least, either one of alkali earth metal ion or oxoacid ion, or a produce obtained by processing a titanium oxide with an acid and/or with alkali earth metal ion, as effective ingredients.
  - B01J20/06 ;A61K33/24 ;B01J20/04

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富田製薬株式会社 徳島県鳴門市瀬戸町明神字丸山85番地1

(72)発明者 大久保 彰

鳴門市瀬戸町明神字丸山85番地1 富田製

薬株式会社内

(74)代理人 弁理士 三枝 英二 (外2名)

(54) 【発明の名称】 リン酸イオン吸着剤

## (57) 【要約】

【目的】本発明は、優れたリン酸イオン吸着力を有し、 医薬品及び工業用製品として有用なリン酸イオン吸着剤 を提供することを目的とする。

【構成】本発明リン酸イオン吸着剤は、チタン塩を加水 分解して得られるチタン酸化物、又はアルカリ土類金属 イオン及びオキソ酸イオンの少なくとも一方を含有させ たチタン塩を加水分解して得られるチタン酸化物、或い は上記チタン酸化物を酸処理及び(又は)アルカリ土類 金属イオン処理した生成物を有効成分として含有するも のである。